material is on file at the U.S. Coast Guard, Office of Design and Engineering Standards (G-MSE), 2100 Second Street SW., Washington, DC 20593–0001 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*. All material is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are:

American Society for Testing and Materials (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428–2959

ASTM F 1121–87 (Reapproved 1993), Standard Specification for International Shore Connections for Marine Fire Applications, 1987 .....34.10–15

National Fire Protection Association (NFPA)

1 Batterymarch Park, Quincy, MA 02269–9101

NFPA 13–1996, Standard for the Installation of Sprinkler Systems—34.30–1

[CGD 88–032, 56 FR 35821, July 29, 1991, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996; CGD 97–057, 62 FR 51043, Sept. 30, 1997; CGD 95–028, 62 FR 51198, Sept. 30, 1997; USCG-1999–6216, 64 FR 53223, Oct. 1, 1999; USCG-1999–5151, 64 FR 67177, Dec. 1, 1999]

Subpart 34.05—Firefighting Equipment, Where Required

§ 34.05–1 Fire main system—T/ALL.

(a) Fire pumps, piping, hydrants, hose and nozzles shall be installed on all tankships.

(b) The arrangements and details of the fire main system shall be as set forth in subpart 34.10.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 77–057a, 44 FR 66502, Nov. 19, 1979]

§ 34.05–5 Fire-extinguishing systems—T/ALL.

(a) Approved fire extinguishing systems must be installed on all tankships in the following locations. Previously approved installations may be retained as long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(1) *Dry cargo compartments.* A carbon dioxide or water spray system must be installed for the protection of all dry cargo compartments. Where such compartments are readily accessible by means of doors such spaces need be protected only by the fire main system.

(2) *Cargo tanks.* A deck foam system must be installed for the protection of all cargo tank spaces. Where a deck foam system is installed, an approved inert gas, steam or other system may also be installed for the purposes of fire prevention or inerting of cargo tanks. For vessels under 100 feet in length, the semiportable equipment required by footnote 1 of table 34.05–5(a) will be considered as meeting the requirements of this subparagraph.

(3) *Lamp and paint lockers and similar spaces.* A carbon dioxide or water spray system must be installed in all lamp and paint lockers, oil rooms, and similar spaces.

(4) *Pump rooms.* A carbon dioxide, inert gas, foam or water spray system must be installed for the protection of all pumprooms.

(5) *Boilerrooms.* On tankships contracted for on or after November 19, 1952, a carbon dioxide or foam system shall be installed for the protection of all spaces containing oil fired boilers, either main or auxiliary, their fuel oil service pumps and/or such fuel oil units as the heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pumps.

(6) *Machinery spaces.* A carbon dioxide system shall be installed for the protection of machinery spaces containing internal combustion propelling engines using fuel having a flashpoint of less than 110 degrees F.

(7) *Internal combustion installations.* Fire-extinguishing systems shall be provided for internal combustion installations in accordance with the following:

(i) If a fire-extinguishing system is installed to protect an internal combustion installation, the system shall be of the carbon dioxide type.

(ii) On vessels of 1,000 gross tons and over on an international voyage, the

construction or conversion of which is contracted for on or after May 26, 1965, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b.h.p. or greater, or their fuel oil units, including purifiers, valves, and manifolds.

(iii) On vessels of 1,000 gross tons and over, the construction, conversion or automation of which is contracted for on or after January 1, 1968, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b.h.p. or greater, or their fuel oil units, including purifiers, valves and manifolds.

(8) *Enclosed ventilating system.* On tankships contracted for on or after January 1, 1962, where an enclosed ventilating system is installed for electric propulsion motors or generators, a carbon dioxide extinguishing system shall be installed in such system.

(b) The arrangements and details of the fire-extinguishing systems shall be as set forth in subparts 34.10 through 34.20.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 67–90, 33 FR 1015, Jan. 26, 1968; CGD 77–057a, 44 FR 66502, Nov. 19, 1979; CGD 95–027, 61 FR 25998, May 23, 1996]

§ 34.05–10 Portable and semiportable extinguishers—TB/ALL.

(a) All portable and semiportable extinguishers on board tank vessels shall be of an approved type.

(b) The type, size, location and arrangement of portable and semiportable extinguishers shall be as set forth in subpart 34.50.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970]

§ 34.05–20 Fire axes—T/ALL.

(a) Fire axes shall be provided on all tankships.

(b) The location and arrangement of fire axes shall be as set forth in subpart 34.60.

Subpart 34.10—Fire Main System, Details

§ 34.10–1 Application—TB/ALL.

(a) On all tankships the provisions of this subpart, with the exception of § 34.10–90, shall apply to all fire main installations contracted for on or after May 26, 1965. Installations contracted for prior to May 26, 1965, shall meet the requirements of § 34.10–90.

(b) If a fire main system is installed on a tank barge, the system shall meet the intent of this subpart insofar as reasonable and practicable.

§ 34.10–5 Fire pumps—T/ALL.

(a) Tankships shall be equipped with independently driven fire pumps in accordance with table 34.10–5(a).

TABLE 34.10–5(a)—FIRE PUMPS

Size vessel, L.O.A. (feet)		Minimum number of pumps	Powerful streams of water per pump	Minimum hydrant and hose size (inches)	
Over—	Not over—			Exterior stations	Interior stations
	100	[1]	.....	.....	.....
100	250	[2] 1	[3] 2	1½	1½
250	400	2	[3] 2	1½	1½
400	650	2	[3] 2	[4] 2½	1½
650	.....	2	[3] 3	[4] 2½	1½

[1] Vessels of 65 feet and not over 100 feet shall be equipped with 2 B-V extinguishers. (Refer to Table 34.50–5(c).) Vessels under 65 feet shall be equipped with 1 B-V extinguisher. (Refer to Table 34.50–5(c).)

[2] Vessels of 1,000 gross tons and over on an international voyage shall have at least 2 fire pumps.

[3] From hydrants having greatest pressure drop between fire-pump(s) and nozzles.

[4] Where 2½-inch hydrant size is required, two 1½-inch outlets may be substituted therefor with two 1½-inch hoses.

(b) Each pump shall be capable of delivering simultaneously the number of streams of water required by table 34.10–5(a) from the outlets having the greatest pressure drop between fire pump(s) and nozzles at a Pitot tube pressure of approximately 75 p.s.i. Where 1½-inch hose is permitted in lieu of 2½-inch hose by footnote 3 of Table 34.10–5(a), the pump capacity shall be determined on the basis that both hoses are used.

(c) On tankships of 1,000 gross tons and over on an international voyage, each required fire pump, while delivering water through the fire main system at a pressure corresponding to that required by § 34.10–15(e), shall have a minimum capacity of at least two-